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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,179	02/25/2005	Ralf Widera	520.1045	4000
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EXAMINER				
LIN, WEN TAI				
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2454				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/507,179

**Applicant(s)**

WIDERA ET AL.

**Examiner**

Wen-Tai Lin

**Art Unit**

2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-15, 18-23 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-15, 18-23 and 29-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 13-15, 18-23 and 29-31 are presented for examination.
2. The text of those sections of Title 35, USC code not included in this action can be found in the prior Office Action.

***Claim Rejections - 35 USC § 103***

3. Claims 13-15, 18-23 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al. [U.S. Pat. No. 6847613].
4. Mimura was cited as one of the prior art in the previous office action.
5. As to claim 13, Mimura teaches the invention as claimed including: a method for transmitting measured information from a measuring computer [e.g., any of 33 or 34, Fig. 3] to a control computer of a measuring system [e.g., 37, Fig. 3], the measuring computer and the control computer being interconnected via a telecommunications network [Abstract; col. 8, lines 5-21], the method comprising:  
  
transmitting a plurality of measurement packets from a sending measuring computer to the measuring computer over a measurement path so as to provide measured data including a

plurality of respective one-way delay measurements of the measurement path [e.g., col. 7, lines 21-29; col. 1, lines 23-32];

combining the measured data into an aggregation of characteristic values having a lower volume than the measured data [e.g., statistic values; Figs. 5 and 7-11], the characteristic values such as maximum, mean, and minimum usage bandwidth and time stamping the start, end and duration of a routing path [78-79, Fig. 7];

associating the characteristic values with a time of the combining [e.g., col.7, lines 21 - 29]; and

transmitting the characteristic values from the measuring computer to the control computer [Fig.3; col. 9, lines 9-12 and 51-56].

Mimura is silent about obtaining at least two of a mean one-way delay, a mean one-way path delay, and a maximum one-way delay as aggregation of characteristic values. However, characterizing a communication path with one-way or two-way delays is well known in the art. Furthermore, it is well known that a one-way path delay can be derived by time stamping the start, end and the duration of packets routed along the path [e.g., col.1, lines 18-28; col. 14, lines 51-56]. Additionally, it is also well understood that, due to the stochastic nature of network traffic, instantaneous network parameter values fluctuate and traditionally it characterizes the network parameters better in terms of statistical values by taking the mean, minimum and maximum of a group of measurements.

As such, following Mimura's way of reporting bandwidth usage associated with a communication path (see Figs. 7-8), it is obvious that an ordinary skill in the art is able to report

the one-way path delay with the similar mean and minimum-maximum statistical values because the path delay statistics enables one to understand the varying behavior of the networked path over a period of time [see col.7, lines 27-29].

6. As to claim 14, Mimura further teaches that the telecommunications network includes at least one of an internet and an intranet [e.g., col. 1, lines 5-16].

7. As to claim 15, Mimura further teaches that the measured data includes a plurality of measurement parameters, and wherein the combining is performed according to the respective measurement parameters, [e.g., col. 6, line 65 – col. 7, line 29].

8. As to claim 18, Mimura further teaches that the method further comprises determining a time interval for combining the measured data as a function of a measuring method [e.g., col. 12, lines 3 – 8; i.e., all the measured statistics data are obtained from a time interval marked as “interval” in 79 of Fig.7].

9. As to claim 19, Mimura further teaches that the measuring system includes a second measuring computer and wherein measurement packets are transmitted between measuring computer and the second measuring computer [e.g., 33-34, Fig. 7; i.e., since packets travels between nodes 33 and 34 of Fig.3: if node 34 is the measuring computer, then node 33 is the second computer; likewise the reverse is true].

10. As to claim 20, Mimura further teaches that the measurement packets include User Datagram Protocol measurement packets [e.g., col. 12, lines 17-24].

11. As to claim 21, Mimura further teaches that the characteristic values include a sum of all packets lost and a maximum of all successively occurring packet losses, and further comprising determining the sum of all packets lost and the maximum of all successively occurring packet losses during a detection of measurement packet losses in a time interval [e.g., 77, Fig. 7; col. 14, lines 38-56].

12. As to claims 22-23, and 29-31, since the features of these claims can also be found in claims 13-15 and 19, they are rejected for the same reasons set forth in the rejection of claims 13-15 and 19 above.

13. Applicant's arguments with respect to claims 13-15, 18-23 and 29-31 on 6/15/09 have been considered but they are not deemed to be persuasive.

14. In the remarks Applicant argues that Mimura fails to teach (1) combining at least two of the various enumerated parameters into an aggregation of characteristic values and (2) associating a time of combining with the characteristics values. Applicant also argues that the examiner's Office Action relies on assertions not supported by any concrete evidence in the record to formulate the rejection, therefore Applicant requests that the examiner provide an

affidavit and/or published information concerning the assertions made in the Office Action regarding well known facts.

15. In response to point (1): Applicant is reminded that the claims are rejected under USC 103, wherein the examiner established the fact an ordinary skill in the art would recognize a similar way of aggregating the characteristics values (namely, mean, minimum, and maximum) of one-way delay just like the way Mimura teaching in combining the various characteristics values of bandwidth usage. The examiner does not rely on Mimura or any other evidence in the record to teach that one-way delay measurements can be used to characterize a communication path because it is a well known fact.

As to point (2): Applicant is reminded that, based on Applicant's own specification, the aggregation of characteristic values must occur at the end of each time interval established for such purpose. That is, it is accurate enough to use the end of each respective time interval as the time when aggregation takes place. At col. 7, lines 21-29, Mimura teaches that each set of bandwidth usage characteristics values (e.g., 78, Fig. 7) is also associated with three timestamps indicating the start, end and duration of time the measured raw packets are engages. It is clear that the timestamp marking the end of each measured packet in a respective interval accurately describes a time of combining the characteristic values for the associated packets.

As to the last point regarding a request for affidavit and/or published information concerning the assertions made in the Office Action: Applicant is directed to US pat. No. 5,561,825, wherein Yamagami et al. teaches measurement of path delays with mean, maximum and minimum values as aggregated characteristics values (see Fig. 11 and its relevant passages).

For at least the foregoing reasons, it is submitted that the prior art of record reads on the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571)272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquiries draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

August 31, 2009

/Wen-Tai Lin/

Primary Examiner, Art Unit 2454